

SN: 09/941,453

IN THE CLAIMS

1. (Previously Presented) A method of distinguishing a dummy feature from a main feature, the method comprising:  
selecting a mask layer;  
providing a technique to identify the dummy feature on the mask layer generated with a one-level file; and  
applying the technique to the selected mask layer.
2. (Original) The method of Claim 1, wherein the technique includes determining at least one of a size of a feature, a shape of a feature, a pattern from multiple features, and a proximity of a feature to another feature.
3. (Original) The method of Claim 1, further including using information from at least one other mask layer to use in the technique.
4. (Original) The method of Claim 3, wherein the information includes at least one of connectivity between the selected mask layer and the at least one other mask layer, and a functional association between the selected mask layer and the at least one other mask layer.
5. (Original) The method of Claim 1, wherein the method is performed during at least one of optical proximity correction, placement of phase-shifting structures, mask fabrication, mask inspection, and mask repair.
6. (Previously Presented) An automated method of processing a mask layer for manufacturing an integrated circuit, the automated method comprising:

SN: 09/941,453

identifying a plurality of main features and at least one dummy feature in the mask layer generated with a one-level file;  
and

providing the processing only to the plurality of main features.

7. (Original) The method of Claim 6, wherein processing includes at least one of correcting for optical proximity, providing phase-shifting structures, and using a user input regarding at least one of a main feature and a dummy feature.

8. (Original) The method of Claim 6, wherein processing is performed during at least one of fabrication of a mask, inspection of a mask, and repair of a mask.

9. (Original) The method of Claim 6, wherein identifying includes applying at least one of a multiple layer technique and a geometry technique.

10. (Original) The method of Claim 6, wherein identifying includes determining a size of a feature on the mask layer, a shape of a feature on the mask layer, a pattern from multiple features on the mask layer, and a proximity of a feature to another feature on the mask layer.

11. (Original) The method of Claim 6, wherein identifying includes using information from at least one other mask layer for the integrated circuit.

12. (Original) The method of Claim 11, wherein the information includes at least one of connectivity between the mask layer and the at least one other mask layer, and a

SN: 09/941,453

functional association between the mask layer and the at least one other mask layer.

13-47 (Cancelled)

48. (Previously Presented) A method of inspecting a mask for defects, the mask including a plurality of features, the method comprising:

reading a mask data preparation format file, the mask data preparation file being a one-level file;

identifying dummy versus non-dummy features using the mask data preparation format file; and

inspecting only non-dummy features.

49. (Original) The method of Claim 48, wherein identifying includes determining at least one of a size of a feature, a shape of a feature, a pattern from multiple features, and a proximity of a feature to another feature.

50. (Original) The method of Claim 48, wherein identifying includes using information from at least one other mask.

51. (Original) The method of Claim 50, wherein the information includes at least one of connectivity and a functional association between mask layers.

52. (Original) The method of Claim 48, further including marking only the non-dummy features for repair.

53-54 (Cancelled)

55. (Previously Presented) A method of conserving resources

SN: 09/941,453

in a computer system during optical proximity correction (OPC) of a layout of an integrated circuit (IC), the method comprising:

identifying dummy versus non-dummy features from the layout, wherein dummy and non-dummy features are not separated in data representation; and

expending resources for OPC only on non-dummy features.

56. (Original) The method of Claim 55, wherein identifying includes determining at least one of a connectivity of features, a functional association of features, and a geometrical description of features.

57-65 (Cancelled)